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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/277,198	03/26/1999	YOSHIHITO ASAO	Q53565	3195

7590 12/03/2001

SUGHRUE MION ZINN MACPEAK & SEAS
2100 PENNSYLVANIA AVENUE NW
WASHINGTON, DC 20037

EXAMINER

TAMAI, KARL I

ART UNIT	PAPER NUMBER
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2834

DATE MAILED: 12/03/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	09/277,198		ASAO, YOSHIHITO	
	Examiner		Art Unit	
	Tamai IE Karl		2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 5-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The Applicant's arguments on Appeal regarding claim 2 is persuasive. Therefore the finality of the rejection of the last Office is withdrawn.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adachi et al.(Adachi)(JP 9-103052), Kawai et al.(US 5,691,590), and Glennon(US 4,598,223).

Adachi discloses the stator for an alternator essentially as claimed except for the inner circumferential surfaces of the bridge portions are placed in contact with the axial end surfaces of the stator core and the stator coils being three phase.

Glennon teaches that it is well known to form a stator for a dynamoelectric machine with the bridge portions forced into contact with the axial end surfaces of the stator core in order shorten the axial length of the assembly. Although the teachings of Glennon are not specifically applied to a pre-formed coil assembly, Glennon does teach shortening the stator assembly by bringing the end-turns of the coil into contact with the stator core. Such teachings would lead one of ordinary skill in the art to form a pre-formed coil such that the gaps provided between the axially arranged elements was minimized.

Art Unit: 2834

Kawai teaches the flat stator coils being three phase for use in an automobile.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have formed the stator of Adachi such that the end turns of the pre-formed coils contact the axial end surface of the stator core in order to axially shorten the stator assembly, as taught by Glennon, and with the coils being three phase as taught by Kawai, because Adachi suggests the use of the coils in an automobile generator.

4. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adachi, Glennon, and Kawai, in further view of Schonfelder(US 2,234,903). Adachi, Glennon, and Kawai teach every aspect of the invention except groove in the end surface of the teeth. Schonfelder teaches grooves in the end of the stator teeth to suppress vibrations. It would have been obvious to one of ordinary skill in the art at the time of the invention to have the stator of Adachi, Kawai, and Glennon with the grooves of Schonfelder to suppress vibrations.

5. Claims 1 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adachi et al.(Adachi)(JP 9-103052) and Fujiwara et al.(Fujiwara)(JP 62-201,038) and Kawai et al.(US 5691590).

Adachi discloses the stator for an alternator essentially as claimed except for the inner circumferential surfaces of the bridge portions are placed in contact with the axial end surfaces of the stator core and the coils being 3 phase.

Fujiwara teaches a stator with the coils wound and inserted into a slot with the ends of the coil shaped to come in contact with the end of the stator to provide an axially thin stator. Kawai teaches the flat stator coils being three phase for use in an automobile. It would have been obvious to one of ordinary skill in the art at the time of the invention to have formed the stator of Adachi such that the end turns of the pre-formed coils contact the axial end surface of the stator core in order to axially shorten the stator assembly, as taught by Fujiwara, and with the coils being three phase as taught by Kawai, because Adachi suggests the use of the coils in an automobile generator.

6. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adachi, Fujiwara, and Kawai, in further view of Schonfelder(US 2,234,903). Adachi, Glennon, and Kawai teach every aspect of the invention except groove in the end surface of the teeth. Schonfelder teaches grooves in the end of the stator teeth to suppress vibrations. It would have been obvious to one of ordinary skill in the art at the time of the invention to have the stator of Adachi, Kawai, and Fujiwara with the grooves of Schonfelder to suppress vibrations.

Response to Arguments

7. Applicant's arguments with respect to claims 1-4 have been considered but are moot in view of the new grounds of rejection. The examiner apologizes for the delay in proceeding to the Board of Appeals, but delays only to presents a more complete rejection of the claims.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl I.E. Tamai whose telephone number is (703) 305-7066.

The examiner can be normally contacted on Monday through Friday from 8:00 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Nestor Ramirez, can be reached at (703)308-1371. The facsimile number for the Group is (703)305-3432.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.



Karl I Tamai
PRIMARY PATENT EXAMINER
November 19, 2001

KARL TAMAI
PRIMARY EXAMINER